

EGCG (–)-Epigallocatechin gallate) purification from green tea polyphenol extract.

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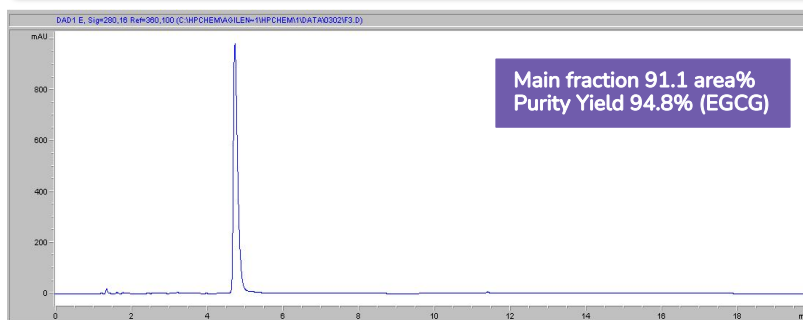
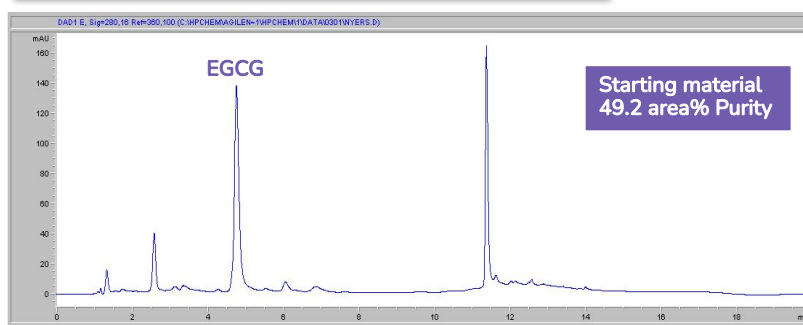
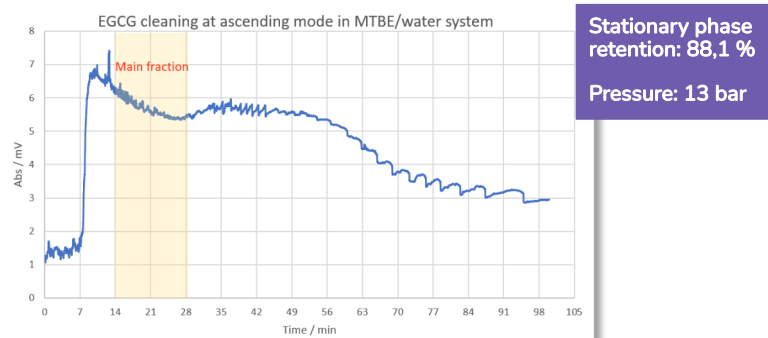
INTRODUCTION

Epigallocatechin gallate (EGCG), also known as epigallocatechin-3-gallate, is the ester of epigallocatechin and gallic acid, and is a type of catechin. EGCG – the most abundant catechin in tea – is a polyphenol under basic research for its potential to affect human health and disease. EGCG is used in many dietary supplements. Cleaning the EGCG is of great importance.

METHOD DESCRIPTION

Equipment	miniLiLi 35ml column
Mode	Ascending mode
Solvent system	MTBE / Water, ratio 1:1
Flow rate	1ml/min
Rotor speed	1000 rpm
Sample	50mg crude EGCG / 0.25ml EtOAc
Detection	280 nm UV
Fraction	7ml fraction volume, collection start after 7 min

RESULTS AND DISCUSSION



CONCLUSION

The results demonstrate that EGCG can be purified with high efficiency and at high purities with the miniLiLi column. These findings show that there can be reduced purification costs at manufacturing scale with LiLiChro technology